

# Oconee Timeline

| Date    | Summary of Events   |
|---------|---|
| 5/30/08 | <ul style="list-style-type: none"><li>• LIC-504 meeting.<ul style="list-style-type: none"><li>○ Steve Laur gave a presentation on the process.</li><li>○ Pat Hiland argued against pursuing flood protection on several points and was not convinced of the lack of adequate protection.</li><li>○ None of the developed options for review had the opportunity to be presented.</li><li>○ Andy Hutto (Oconee site Resident) by phone expressed concern over the condition of the roads after floodwaters recede.</li><li>○ Ed Williamson of OGC will work with us on any further actions.</li><li>○ SES concluded that a demand-for-information (50.54(f)) letter should be written and given to Jack for comment soon.</li></ul></li></ul>  |
| 6/4/08  | <ul style="list-style-type: none"><li>• Met with Pat Hiland with DE, OGC and DORL.<ul style="list-style-type: none"><li>○ Geary Mizuno discussed adequate protection.</li><li>○ Found out that the licensing basis was in the construction permit for Oconee. Lenny Olshan's argument that there was no flooding licensing basis was incorrect. Oconee is licensed to a draft version of GDC-2. Lenny admitted that he knew this all along but, didn't understand how this would help us in this project.</li><li>○ George Wilson discussed the "high hazard" dam classification and the inspection regime.</li></ul></li><li>• Lenny Olshan sent out a draft version of a 50.54(f) letter.</li><li>• SES level meeting with Jack.<ul style="list-style-type: none"><li>○ Got authorization to pursue the backfit.</li></ul></li></ul>  |
| 6/12/08 | <ul style="list-style-type: none"><li>• Got a copy of the Federal Register (Volume 32, Number 132, 7/11/67) which contained the draft GDC-2 that Oconee is licensed by.</li></ul>   |
| 8/21/08 | <ul style="list-style-type: none"><li>• Met with Craig Ehrlanger (NSIR) on our interface with DHS.<ul style="list-style-type: none"><li>○ Tentative meeting set with DHS representative to explain the Jocassee Dam concern on 8/25/08.</li><li>○ Further meeting in September with Assistant DHS Secretary.</li><li>○ Discussed very few aspects of the Buffer Zone Protection Plan related to Jocassee Dam but could not share or show us.</li><li>○ Reminded Craig that Mark Cunningham discussed this issue with NSIR on November 2007.</li></ul></li><li>• Phone call with Duke Oconee Management, Duke Headquarters PRA, Region II, and the site Residents on the dam failure frequency.<ul style="list-style-type: none"><li>○ Jim Vail discussed the two failures counted for the failure frequency determination.</li><li>○ Duke was not interested in discussing the apparent large discrepancy between our dam-year computations.</li><li>○ Duke claimed that this call will help them put together an interim contingency plan while they concentrate on a long term corrective action.</li></ul></li><li>• Preparation of tables for the face-to-face meeting with Duke on initiating event frequencies and consequences. Made figures instead of table.</li></ul> |

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| 8/28/08  | <ul style="list-style-type: none"><li>• Face-to-face meeting with Oconee Management and Duke Headquarters PRA.<ul style="list-style-type: none"><li>○ Duke expressed their desire to parse out dam failure frequencies into discrete inundation levels based on their two industry failure events.</li><li>○ Duke claimed that they have contracted Dr. David Bowles from Utah State University to perform a dam frequency failure calculation.</li><li>○ Duke discussed the spillway design of Jocassee and that it differs from the other dams in the database.</li><li>○ Duke admitted that they could not reproduce the original NSAC/60 calculation of a 4.71-ft inundation height.</li><li>○ Duke presented the Potential Failure Modes Analysis (PFMA).</li><li>○ Duke briefly brought up a potential engineering solution of installing watertight doors.</li></ul></li></ul>   |
| 9/10/08  | <ul style="list-style-type: none"><li>• Contact to Dave Decker from Annie Caputo (Senator Boxer's office) regarding why NRC did not order Oconee to shut down.<ul style="list-style-type: none"><li>○ Prepared a response.</li></ul></li></ul>  |
| 9/20/08  | <ul style="list-style-type: none"><li>• Mike Franovich met with DHS and NSIR on Jocassee Dam failure and Oconee.</li></ul>  |
| 10/15/08 | <ul style="list-style-type: none"><li>• Phone call with Duke technical personnel, Duke Headquarters PRA with NRO, DE, DORL, and Oconee site Resident.<ul style="list-style-type: none"><li>○ NRC questions on Duke's choice not to use 2-D analysis and the commitment to extend the SSF wall only by 2.5 ft.</li><li>○ Duke claimed that the existing SSF wall would not be able to handle any additional load. They decided to use 1-D HEC-RAS.</li><li>○ Discussed an engineering solution of installing watertight doors which would solve many of the shortcomings of the design. Ken See expressed his view that this would be the best solution.</li></ul></li><li>• LIC-504 meeting (in EBB) with SES representation from DRA, DORL (detailed deputy director from DOE), and DE.<ul style="list-style-type: none"><li>○ Expressed concerns over seismic fragility.</li><li>○ Large bands of sensitivity of inundation level.</li><li>○ Concerns over the non-conservative breach parameters done in the original 1992 inundation study.</li><li>○ Discussion of the next face-to-face meeting and that it should be a management level one.</li><li>○ Watertight doors with re-engineering the intakes/ventilation appeared to be the best solution to the problem.</li></ul></li></ul> |
| 11/14/08 | <ul style="list-style-type: none"><li>• Call with FERC (Dan Mahoney, Ken Fearon, and Wayne King), DORL and DRA.<ul style="list-style-type: none"><li>○ Discussed the inundation calculations and how NRC views PRA vs. licensing basis.</li><li>○ FERC will pull records on the dam construction.</li><li>○ PRA is in the developmental stage at FERC.</li><li>○ FERC suggested a face-to-face meeting.</li></ul></li></ul>   |

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| 11/26/08    | <ul style="list-style-type: none"><li>• Met with DHS (Craig Conklin and his staff) at their offices with DE, DRA, and NSIR.<ul style="list-style-type: none"><li>○ Discussed the issue and consequences of dam rupture.</li><li>○ Discussed generic implications at other sites.</li><li>○ DHS discussed some of their insights on infrastructure and requested some additional information from NSIR.</li></ul></li></ul>   |
| 12/1/08     | <ul style="list-style-type: none"><li>• Met with FERC at their offices (was out of office).</li></ul>  |
| 12/4/08     | <ul style="list-style-type: none"><li>• Met with Duke technical staff (was out of office).</li></ul>   |
| 12/23/08    | <ul style="list-style-type: none"><li>• Call between Duke (Rich Freudenberger) and Melanie Galloway (DRA) on the revised HEC-RAS inundation study progress.<ul style="list-style-type: none"><li>○ Duke claimed that inundation levels might exceed 9 feet.</li></ul></li></ul>  |
| 2/26/09     | <ul style="list-style-type: none"><li>• DRA tour of Jocassee Dam site.</li></ul>   |
| 5/11/09     | <ul style="list-style-type: none"><li>• Meeting with Duke at HQ.<ul style="list-style-type: none"><li>○ Duke will present only the initial phase of HEC-RAS runs done to benchmark the 1992 FERC inundation study.</li><li>○ Jack Grobe reiterated the NRC position that this is an adequate protection and not a PRA issue.</li><li>○ Duke had not done any sensitivity calculations to vary breach parameters.</li><li>○ Duke argued that NRC in the past did not cite Yankee-Rowe on not having adequate protection against failure of the Harriman Dam as a precedent.</li><li>○ Discussed lumped answers to the HEC-RAS analysis questions due to time constraints.</li></ul></li></ul> |